

State of Oregon
Department of Environmental Quality

Memorandum

Date: May 2, 2025

To: FILE

Through: Don Hanson, RG, Lead worker
Brad Shultz, Manager
Western Region Cleanup Program

From: Sarah Kingery
Western Region

Subject: ASTRO #207, LUST 20-95-7019; Staff Memorandum in support of a No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended No Further Action (NFA) determination for the Astro #207 site, in Eugene. As discussed in this report, contaminant concentrations in soil, groundwater, and soil vapor are below acceptable risk levels.

The proposed NFA determination meets the requirements of Oregon Administrative Rules Chapter 340, Division 122, Sections 0205 to 0360 and ORS 465.200 through 465.455.

The proposal is based on information documented in the administrative record for this site. A list of the key administrative record documents is presented at the end of this report.

1. BACKGROUND

Site location.

The site's location can be described as follows:

- Address: 925 West 6th Avenue, Eugene, in Lane County Oregon
- Latitude 44°03'12" North, Longitude 123°06'24" West
- Township 17 South, Range 3 West, Section 31, Willamette Meridian
- Tax Map Number 17033122, Tax Lot 2901.

Site setting.

The site is currently an active automotive fueling station located at the northeast intersection of West 6th Avenue (Oregon Highway 126) and Blair Boulevard in a commercial use area of Eugene, Oregon. The lot size is 0.2 acres and is zoned community commercial. The ground surface is flat and covered by asphalt. Adams Street adjoins the site to the east (Figure 1). Adjoining property use includes a restaurant and parking lot.

Physical setting.

The site is a paved flat property 0.2 acres in size. The depth to groundwater at the site is typically encountered between 9 and 14 feet below ground surface (bgs). Groundwater flow direction is to the southwest towards Amazon Creek, approximately $\frac{3}{4}$ mile from the site. Soil across the site generally consists of silt and sand fill to 3 feet bgs underlain by a clay layer that varied in thickness. Sand was encountered beneath the clay and extended to the maximum depth explored of 17 feet bgs.

Site history.

Documents submitted to DEQ indicate that the service station was purchased in 1972. There is no information on how long the service station operated prior to 1972. The service station is in operation today and there are no anticipated use changes.

2. BENEFICIAL LAND AND WATER USE DETERMINATIONS

Land use.

The site is zoned community commercial (C-2). This zone provides areas for a wide range of purchaser goods, entertainment, office and service needs. Residential uses are also permitted in this zone; however, the site has been used for retail fuel sales since at least 1972, and use is not anticipated to change. Adjacent properties are also zoned C-2. Adjacent properties include a restaurant and vacant lot.

Groundwater use.

Water is provided to the site and surrounding properties by the Eugene Water and Electric Board (EWEB). A beneficial Use Survey was conducted in 2017 by Robert D Miller Consulting. They confirmed with EWEB that all tax lots except for those that are parking lots or vacant are supplied water by EWEB. Oregon Water Resources Records were searched for wells within $\frac{1}{8}$ th mile radius of the site. No wells were located within the searched radius.

Surface water use.

The nearest surface water bodies are the Willamette River located 1 mile east of the site and Amazon Creek located $\frac{3}{4}$ of a mile to the south. Both bodies of water are located outside of the area of contamination associated with the site. Stormwater from the site drains to West 6th Avenue and is collected by city storm drains.

3. INVESTIGATION AND CLEANUP WORK

During an underground storage tank (UST) upgrade in 1995 a release of gasoline was discovered. This was reported to DEQ and the leaking underground storage tank file 20-95-7019 was opened. Free floating product was observed within the UST pit. Five onsite monitoring wells were installed in 1995 (MW-1 through MW-5). Monitoring wells MW-1, MW-2, MW-3, and MW-5 were decommissioned in 2016 prior to UST decommissioning. The underground storage tanks were decommissioned by removal in 2017. Monitoring wells MW-6, MW-7, MW-8, and MW-9 were installed in 2020.

A site investigation occurred in 2017 to define the lateral extent of contamination prior to soil remediation by excavation. Sixty-nine soil samples were collected from 32 borings. Borings

were completed onsite and on adjacent tax lots 2900 and 3000. Soil samples were analyzed for gasoline-range hydrocarbons by NWTPH-Gx. Sample depths ranged from 12 to 16 feet below ground surface (bgs) except for 2 samples that were collected at depths less than 3 feet bgs.

Soil remediation by excavation occurred across the site and extended onto adjacent properties to the north of the site (tax lots 3000 and 2900, Figure 1). In 2017, approximately 5,100 tons of contaminated soil was excavated and disposed offsite: 3,000 tons were disposed of at Coffin Butte Landfill, 2,100 tons were disposed of at Short Mountain Landfill. Sixty soil samples were collected from the base and side walls of the final excavation. All the soil samples were analyzed for gasoline-range hydrocarbons (TPH-Gx). Most soil samples were also analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Four samples were also analyzed for diesel and oil-range hydrocarbons by NWTPH-Dx. Three samples were analyzed for total lead by EPA Method 6020.

Groundwater monitoring occurred between 1995 and 2022. Groundwater samples were analyzed for volatile organic compounds by EPA Method 8260. Select samples were also analyzed for gasoline and diesel and oil-range hydrocarbons by NWTPH-Gx and NWTPH-Dx, respectively; polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270 SIM, and dissolved lead by EPA Method 6020. Groundwater at the site was treated between 1995 and 2013 using several in-situ methods: air sparging, magnesium peroxide well inserts, and magnesium peroxide injections. Free product was also removed from MW-5 using absorbent pads between 1996 and 1999. There are no estimates for the volume of product removed

Soil vapor on and offsite was analyzed in 2021. One sub-slab sample was obtained onsite in the service station manager office and a second soil vapor sample was obtained from the parking lot in front of the adjacent restaurant on tax lot 2900. The samples were analyzed for VOCs by EPA Method TO-15.

Nature and extent of contamination.

The contaminants of concern at the site are gasoline-range hydrocarbons and VOCs. VOCs detected at the site have included benzene, toluene, ethylbenzene, total xylenes, naphthalene, isopropylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. Soil and groundwater were contaminated across the site. Following soil and groundwater remediation the concentrations of these contaminants has decreased. Low levels of soil vapor contamination have also been detected.

Soil samples collected after soil remediation by excavation were collected at depths typically ranging from 15 to 16.5 feet bgs. A few shallow samples were also collected along the top of the excavation walls at depths ranging from 1.5 to 3 feet bgs. Contaminants of concern were not detected in these shallow soil samples. Concentrations of TPH-G in most of the deeper samples ranged from non-detect to 150 milligrams per kilogram (mg/kg). Samples with higher TPH-G concentrations are discussed below. Other contaminants detected in the soil samples included diesel, benzene, ethylbenzene, and naphthalene. Diesel was only detected in one of the confirmation samples and has not been a contaminant of concern during this project.

Besides the site, contaminated soil was also excavated from two adjacent properties (tax lots 3000 and 2900). Soil contamination was not detected in confirmation soil samples collected from tax lot 2900 except for sample 116@16 collected at a depth of 16 feet bgs. This sample, located on the southeast corner of tax lot 2900, contained TPH-G at a concentration of 174 mg/kg and naphthalene at a concentration of 1.28 mg/kg. All other contaminants of interest were not detected. Soil contamination was not detected in the confirmation samples obtained from tax lot 3000. Soil samples collected from the southern excavation wall on site, adjacent to the 6th Avenue right-of-way, did not contain concentrations of gasoline range hydrocarbons except for two samples collected from the southeast wall at depths of 14 and 15 feet bgs. Concentrations of TPH-G in these samples were 1,340 mg/kg and 4,000 mg/kg. Ethylbenzene and naphthalene were also detected in these samples at concentrations of 1.32 mg/kg and 1.15 mg/kg respectively. This contaminated zone was described by Robert D Miller Consulting, Inc. as being a 2-foot-thick sandy gravel layer approximately 33 feet wide east-west.

There are five monitoring wells currently remaining at the site. MW-8 is located in the southeast corner of tax lot 2900. The other monitoring wells, MW-4, MW-6, MW-7 and MW-9 are located onsite. Following site remediation activities, quarterly groundwater monitoring was conducted in these wells between March 2021 and March 2022. Groundwater samples were analyzed for gasoline and diesel-range hydrocarbons, RBDM VOCs and dissolved lead. Contamination was detected in groundwater samples from March 2021 from MW-4, MW-7, MW-8, and MW-9. However, analytes were not detected in groundwater samples collected from these wells for the remainder of sampling events. No contaminants were detected in samples from MW-6 and MW-7 during any of the 2021 and 2022 sampling events

Soil vapor conditions were evaluated in 2021 beneath the slab of the station manager office and in the restaurant parking lot (tax lot 2900) north of the site. Benzene was detected at both locations at a maximum concentration of 10 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Ethylbenzene was detected beneath the station manager office at a concentration of $9.7 \mu\text{g}/\text{m}^3$. Naphthalene was also detected beneath the office at a concentration of $14 \mu\text{g}/\text{m}^3$.

4. RISK EVALUATION

Conceptual site model.

The soil, groundwater, and soil vapor have been impacted with gasoline-range petroleum hydrocarbons and their associated constituents. The source of the contamination was the UST system which was removed in 2017. Residual soil and soil vapor contamination remains at the site and on the adjacent tax lot 2900. The groundwater has been cleaned up and is no longer contaminated. Based on property use and zoning, pathways are incomplete for residential and ecological receptors. The following receptors are being evaluated:

- Commercial receptors
- Construction and Excavation workers

Pathways by which contamination could reach human receptors are soil ingestion, dermal contact and inhalation and vapor intrusion into buildings.

To evaluate human exposure to residual chemical contamination requires an assessment of the type and extent of that exposure. This is based on current and reasonably likely future site use. DEQ publishes risk-based concentrations (RBCs) for contaminants commonly encountered, for different types of exposure scenarios. These RBCs are conservative estimates of protective levels of contaminants in soil, groundwater and air. Table 1 shows potential exposure pathways and receptors for this site. Based on this, applicable RBCs are identified and used for risk screening.

Table 1. Identification of applicable RBCs, based on pertinent pathways and receptors

	Pathway	Receptor			
			Is pathway complete?	Is RBC Exceeded?	Comments
Soil	Ingestion, Dermal Contact, and Inhalation	Residential and/or Urban Residential	No	No	Note 1
		Occupational	No	No	Remaining contamination is found at depths greater than 3 feet (14-16' bgs)
		Construction Worker	Yes	No	
		Excavation Worker	Yes	No	
	Volatilization to Outdoor Air	Residential and/or Urban residential	No	No	
		Occupational	No	No	Remaining soil contamination is in small zones along the property boundaries and the bulk of contaminated soil has been removed.
	Volatilization to Indoor Air	Residential	No	NA	Note 2
		Commercial	No	NA	
Groundwater	Ingestion & Inhalation from Tap Water	Residential and/or Urban residential	No	No	
		Occupational	No	No	
	Volatilization to Outdoor air	Residential	No	No	
		Urban residential	No	No	
		Occupational	No	No	There is no residual groundwater contamination at the site.
	Vapor Intrusion into Buildings	Residential	No	No	Note 1
		Commercial	No	No	
	Groundwater in Excavation	Construction & excavation worker	No	No	
Soil Vapor	Intrusion into buildings	Commercial	Yes	Yes	The concentration of naphthalene slightly exceeds RBC but the calculated risk is

					within DEQ acceptable risk levels.
Ecological		Terrestrial & Surface Water	No	No	

Notes:

1. The City of Eugene allows residential on commercially zoned properties however use is not likely to change.
2. DEQ does not have RBCs for volatilization to indoor air from soil. However, soil contaminated with greater than 500 ppm for diesel and 80 ppm for gasoline is considered a potential VI source.

Contaminant concentrations.

There is no residual groundwater contamination at the site. Low levels of soil contamination remain at depth onsite and the southeast corner of tax lot 2900. Gasoline-range hydrocarbons were not detected in 45 of the 60 confirmation samples. Residual gasoline concentrations remaining in soil typically ranged from 5.78 mg/kg to 33 mg/kg. The highest concentration of gasoline was detected in one sample from the southwest corner of the property adjacent to Hwy 99, at a concentration of 14,800 mg/kg. Low levels of VOCs were detected in some confirmation soil samples, specifically benzene, ethylbenzene, naphthalene, iso-propylbenzene, and 1,2,4-trimethylbenzene. Soil vapor samples contained concentrations of BTEX, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. Naphthalene was detected at a concentration of 14 µg/m³.

Soil		
Contaminant of Concern	Maximum Concentration mg/kg	Are any applicable RBCs exceeded?
Gasoline-range hydrocarbons	14,800	Yes
Diesel-range hydrocarbons	185	No
Benzene	0.0605	No
Ethylbenzene	14.3	No
Naphthalene	25.2	No
1,2,4-trimethylbenzene	4.81	No

Soil Gas

Contaminant of Concern	Maximum Concentration µg/m ³	Are any applicable RBCs exceeded?
Benzene	1.2	No
Toluene	29	No
Ethylbenzene	9.7	No
Xylenes	69	No
Naphthalene	14	Yes
1,2,4-trimethylbenzene	48	No
1,3,5-trimethylbenzene	10	No

Human health risk.

Low levels of soil contamination remain across the site at depths of 14 to 16 feet. Only one confirmation soil sample contained a concentration of gasoline greater than the soil ingestion, dermal contact and inhalation risk-based concentration (RBC) for construction workers. This sample location is at a depth of 15 feet on the southwest corner of the site and exceeded the construction worker RBC by a factor of 1.5. The limited amount of contamination and the depth reduce the risk of exposure to construction workers to acceptable levels.

Residual offsite soil contamination is present on the southeast corner of tax lot 2900 at a depth of 13 feet. The concentration of gasoline detected in this location is below the commercial RBCs. Residual gasoline contamination in soil also remains along the southeast corner of the site along the 6th Avenue right-of-way at depths ranging from 14 to 16 feet. Contamination may extend offsite to the south beneath 6th Avenue; however remaining concentrations are below construction and excavation RBCs.

The soil vapor sample obtained from beneath the service station manager office contained naphthalene at concentration slightly above the vapor intrusion into commercial building RBC for commercial receptors, however this amount of contamination should not present an unacceptable risk to workers in the office.

Offsite soil and soil vapor concentrations are below the RBCs for commercial receptors.

Ecological risk.

The area is fully developed or is paved within 100 feet of the impacted area. Groundwater is not impacted. There is no residual shallow soil contamination. There are, therefore, no unacceptable ecological risks identified for the site.

5. RECOMMENDATION

Based on sample results for soil, groundwater and soil vapor that were obtained following removal of contamination and onsite treatment, acceptable risk levels are not exceeded, and a No Further Action determination is recommended for this site. DEQ also recommends that the offsite well MW-8 be abandoned, and adjacent property owners and municipalities be provided with a notice of recommended closure prior to closing the site. The No Further Action determination should be recorded in DEQ's environmental data management system also known as Your DEQ Online (YDO) under project number 20-95-7019.

6. ADMINISTRATIVE RECORD

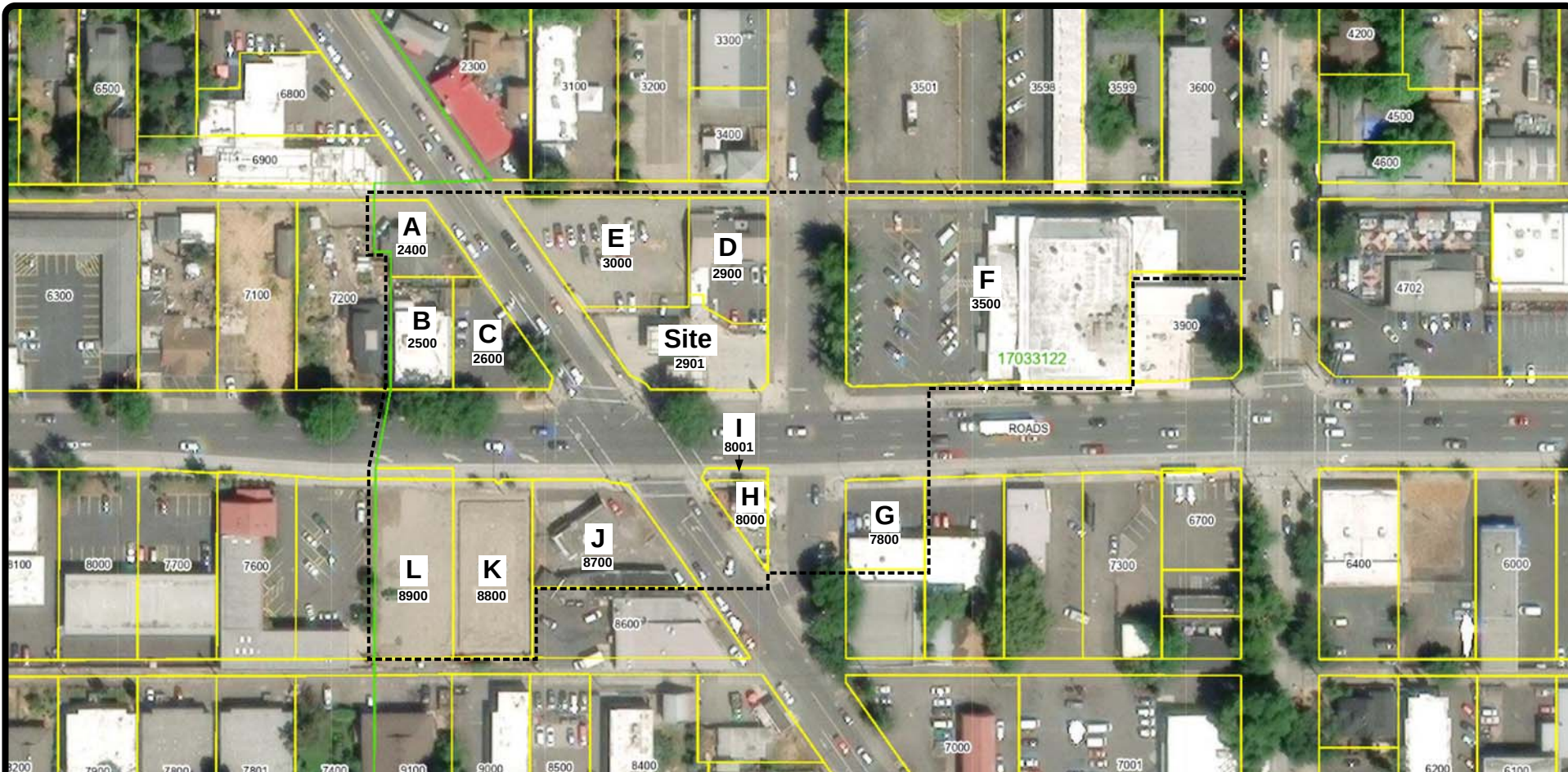
2015-01_20-95-7019_PhaseII.pdf
2016-01-07_20-95-7019 DEQ comments on GW report and workplan.pdf
2017-06-04_20-95-7019_20dayReport.pdf
2021-05-13_20-95-7019_Subslab Testing Report.pdf
2021-05-13_20-95-7019_SubslabVaporTesting.pdf

1995-07-24_20-95-7019_USTInvInterimReport.pdf
2020-08-28_20-95-7019 Invest and CU Report Volume 1.pdf
2020-08-28_20-95-7019 Invest and CU Report Volume 2.pdf
2020-08-28_20-95-7019 Invest and CU Report Volume 3.pdf
2020-08-28_20-95-7019 Invest and CU Report Volume 1.pdf
2020-08-28_20-95-7019 Invest and CU Report Volume 2.pdf
2020-08-28_20-95-7019 Invest and CU Report Volume 3.pdf
2021-02-21_20-95-7019 Lab data.pdf
2021-03-18_20-95-7019_GW Report.pdf
2021-04-18_20-95-7019_GWMR.pdf
2021-04-30_20-95-7019 Well Replacement.pdf
2021-06-10_20-95-7019_GW Report.pdf
2021-09-23_20-95-7019_GW Report.pdf
2021-09-23_20-95-7019_GWMR.pdf
2021-12-08_20-95-7017_GW Report.pdf
2017-03-21_20-95-7019 CMMP Revised.pdf

These documents are available through our online records management system. Additional documents are available in our paper files through a public records request.

7. ATTACHMENTS

1. Site and Surrounding Properties Map
2. Figure 11-Confirmation Soil Samples
3. Revised Data Tables (MSBA)



Adapted From: ORMAP Online Map Viewer (Accessed 6/17/24)

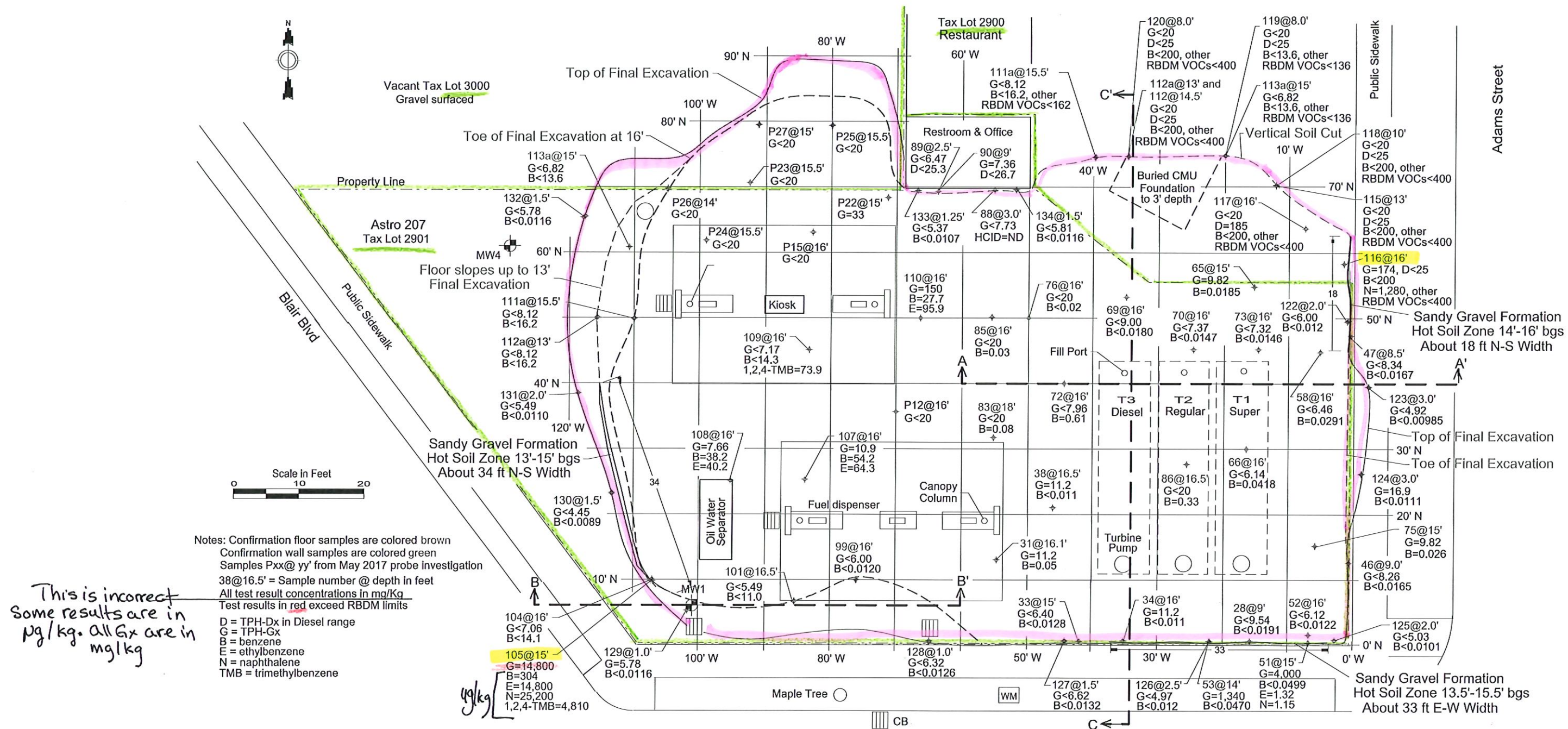


Not to Scale

DEQ STAFF
MEMO -
FIGURE 1

MSBA
Martin S. Burck Associates, Inc.
Geologic and Environmental Consulting Services

FIGURE
**SITE AND SURROUNDING
PROPERTIES MAP**
Astro 207
925 6th Avenue West
Eugene, OR 97402
DEQ LUST No. 20-95-7019



Robert D Miller Consulting, Inc.
 Various soil samples collected: 4/11/17 - 9/19/17
 Drawn by: R D Miller, RG

Fig 11 - CONFIRMATION SOIL SAMPLES

Astro 207
 925 West 6th Avenue
 Eugene, Oregon 97402

Figure modified
 by DEQ - S. Kingery

Table 1 - Preliminary Investigation Analytical Results

Astro 207 in Eugene, Oregon

Date Collected	Sample/Location ID	Depth in Feet	NWTPH -Gx	NWTPH-Dx		Volatile Organic Compounds (VOCs)											
			Diesel	Oil	B	T	E	X	N	EDB	EDC	iso-PB	MTBE	1,2,4-TMB	1,3,5-TMB		
			----- milligrams per kilogram (mg/Kg) -----														
10/20/16	B1 @ 4'	4.0'	7.61	46.5	<50.0	--	--	--	--	--	--	--	--	--	--	--	
"	B1 @ 11'	11.0'	<8.59	<27.3	<54.7	--	--	--	--	--	--	--	--	--	--	--	
"	B2 @ 10.25'	10.25'	<8.23	<25.2	<50.4	--	--	--	--	--	--	--	--	--	--	--	
"	B2 @ 11.25'	11.25'	149	<27.6	<55.3	<0.0168	<0.084	<0.042	<0.126	<0.168	<0.042	<0.042	<0.084	<0.084	<0.084	<0.084	
"	B2 @ 16.25 ¹	16.25'	372	<25.0	<50.0	<0.0115	--	--	--	--	--	--	--	--	--	--	
10/21/16	MW2 - Cuttings ¹	10'-15'	1,010	68.7	61.1	0.0621	0.071	2.64	5.82	3.59	<0.0272	<0.0272	0.758	<0.0544	10.2	3.46	
"	MW3 - Cuttings	10'-15'	51.7	<25.0	160	<0.0119	--	--	--	--	--	--	--	--	--	--	
"	MW5 - Cuttings	10'-15'	31.4	<25.0	<50.0	0.0284	--	--	--	--	--	--	--	--	--	--	
Occupational Exposure Limit ²			130	>Max	>Max	0.10	490	0.90	100	0.34	5.6x10 ⁻⁴	0.013	57,000	0.54	12	110	
Construction Worker Exposure Limit			9,700	4,600	11,000	380	77x10 ⁴	17,000	56x10 ⁴	16,000	9.0	200	27,000	12,000	2,900	2,900	
Excavation Worker Exposure Limit			>Max	>Max	>Max	11,000	28,000	49,000	20,000	580	250	5,600	750,000	320,000	81,000	81,000	

Notes:

"B" means Benzene

"T" means Toluene

"E" means Ethylbenzene

"X" means Xylenes

"N" means Naphthalene

"EDB" means Ethylene Di-Bromide

"EDC" means 1,2-Dichloroethane

"iso-PB" means iso-propylbenzene

"1,2,4-TMB" means 1,2,4-Trimethylbenzene

"1,3,5-TMB" means 1,3,5-Trimethylbenzene

Red indicates test result is above regulatory cleanup limit

Blue - lab detection limit is above regulatory cleanup limit

"--" means compound was not tested

"-Gx" means Gasoline extended range with overlap into Diesel range

"MTBE" means Methyl Tert-Butyl Ether

Footnote₁

Test results of the 8 RCRA Metals were:

Metal	Ag	As	Ba	Cd	Cr	Hg	Pb	Se
B2 @ 16.25'	<0.050	<0.10	<0.50	<0.05	<0.10	<0.004	<0.05	<0.10
MW2 - Cuttings	<0.050	<0.10	<0.50	<0.05	<0.10	<0.004	<0.05	<0.10

Footnote₂

Most stringent pathway for Occupational Users is Leaching to Groundwater RBDM limits in bold are most stringent of the three potential exposure limits

Table 2 - Soil Probe Investigation Analytical Results

Astro 207 in Eugene, Oregon

Date Collected	Sample/Location ID	Depth in Feet	NWTPH-Gx mg/Kg		Date Collected	Sample/Location ID	Depth in Feet	NWTPH-Gx mg/Kg		Date Collected	Sample/Location ID	Depth in Feet	NWTPH-Gx mg/Kg	
05/09/17	P1-1 @ 14.5'	14.5'	<20		05/09/17	P12-1 @ 12'	12'	90		05/12/17	P20-2 @ 16'	16'	124	
"	P1-2 @ 16.5'	16.5'	<20		"	P12-2 @ 14.5'	14.5'	158		05/22/17	P21-1 @ 14.5'	14'	114	
"	P2-1 @ 9.5'	9.5'	<20		"	P12-3 @ 16'	16'	<20		"	P21-2 @ 16'	16'	<20	
"	P2-2 @ 13'	13'	4,370		"	P13-1 @ 9.75'	9.75'	2,760		"	P22-1 @ 14'	14'	2,750	
"	P2-3 @ 16'	16'	<20		"	P13-2 @ 14'	14'	11,700		"	P22-2 @ 16'	16'	33	
"	P3-1 @ 14'	14'	731		"	P13-3 @ 16'	16'	2,120		"	P23-1 @ 14.5'	14.5'	<20	
"	P3-2 @ 16'	16'	<20		"	P13-4 @ 17'	17'	<20		"	P23-2 @ 15.5'	15.5'	<20	
"	P4-1 @ 13'	13'	1,150		"	P14-1 @ 2'	2'	<20		"	P24-1 @ 14'	14'	600	
"	P4-2 @ 16'	16'	<20		"	P14-2 @ 10'	10'	10,900		"	P24-2 @ 15.5'	15.5'	<20	
"	P5-1 @ 13'	13'	<20		"	P14-3 @ 14'	14'	2,450		"	P25-1 @ 13.5'	13.5'	6,030	
"	P5-2 @ 14'	14'	<20		"	P14-4 @ 16.5'	16.5'	803		"	P25-2 @ 15.5'	15.5'	<20	
"	P6-1 @ 14'	14'	<20		"	P15-1 @ 14.5'	14.5'	1,760		"	P26-1 @ 14'	14'	<20	
"	P6-2 @ 15'	15'	<20		"	P15-2 @ 16'	16'	<20		"	P27-1 @ 13.5'	13.5'	439	
"	P7-1 @ 2'	2'	<20		05/12/17	P16-1 @ 14.5'	14.5'	<20		"	P27-2 @ 15'	15'	<20	
"	P7-2 @ 14'	14'	<20		"	P17-1 @ 2.5'	2.5'	<20		"	P28-1 @ 14'	14'	28	
"	P8-1 @ 14'	14'	<20		"	P17-2 @ 14.5'	14.5'	135		"	P28-2 @ 16'	16'	<20	
"	P8-2 @ 16'	16'	<20		"	P17-3 @ 16'	16'	<20		"	P29-1 @ 15'	15'	948	
"	P9-1 @ 14'	14'	82		"	P18-1 @ 14'	14'	<20		"	P30-1 @ 13'	13'	5,010	
"	P9-2 @ 16'	16'	139	"	P18-2 @ 15'	15'	<20	"	P30-2 @ 16'	16'	57			
"	P10-1 @ 12'	12'	<20	"	P19-1 @ 12'	12'	170	"	P31-1 @ 11.5'	11.5'	10,600			
"	P10-2 @ 14.5'	14.5'	1,240	"	P19-2 @ 14.5'	14.5'	3,030	"	P31-2 @ 16'	16'	<20			
"	P10-3 @ 16'	16'	<20	"	P19-3 @ 16.5'	16.5'	<20	"	P32-1 @ 13.5'	13.5'	7,470			
"	P11-1 @ 14'	14'	165	"	P20-1 @ 14'	14'	7,360	"	P32-2 @ 16.5'	16.5'	<20			
"	P11-2 @ 16.5'	16.5'	<20											
RBDM NWTPH-Gx limit for Occupational Users				130	Most stringent pathway for Occupational Users is "Leaching to Groundwater"									
RBDM NWTPH-Gx limit for Construction Workers				9,700	Pathway for Construction Workers is "Soil ingestion, Dermal Contact and Inhalation"									
RBDM NWTPH-Gx limit for Excavation Workers				>Max	Pathway for Excavation Workers is "Soil ingestion, Dermal Contact and Inhalation"									

Date Collected	Sample/Location ID	Depth in Feet	NWTPH-Dx mg/Kg
05/09/17	P14-1 @ 2'	2'	D<25 & O<100
RBDM NWTPH-Dx limit for Occupational Users			14,000
RBDM NWTPH-Dx limit for Construction Workers			4,600
RBDM NWTPH-Dx limit for Excavation Workers			>Max

Notes:

Red indicates test result is above regulatory cleanup limit of 130 mg/Kg Blue - lab detection limit is above regulatory cleanup limit of 130 mg/Kg
 "NWTPH-Gx" means Gasoline extended range with overlap into Diesel range "NWTPH-Dx" shown as individual Diesel and Oil ranges without overlap

Yellow Highlight

Indicates data was revised or added by MSBA on April 8, 2025 following data review

Table 3 - Soil Cleanup Analytical Results

Astro 207 in Eugene, Oregon

Date Collected	Sample ID and Location		Depth in Feet	NWTPH	NWTPH-Dx		Volatile Organic Compounds (VOCs)												Total Lead
				-Gx	Diesel	Oil	B	T	E	X	N	EDB	EDC	iso-PB	MTBE	1,2,4-TMB	1,3,5-TMB		
				milligrams per kilogram (mg/Kg)															
04/11/17	1	3'x16'WX6'N	3'	<5.55	--	--	<0.0111	<0.0555	<0.0278	<0.0833	--	--	--	--	--	--	--	--	
"	2	6'x15'Wx6'N	6'	<7.91	--	--	<0.0158	<0.0791	<0.0395	<0.119	--	--	--	--	--	--	--	--	
"	3	4' @ T1 middle	4'	<5.63	--	--	<0.0113	<0.0563	<0.0281	<0.0844	--	--	--	--	--	--	--	--	
"	4 ¹	6' @ T1 NE corner	6'	<62.2	241	74.6	<0.0124	<0.0622	0.414	<0.1182	22.5	<0.0622	<0.0311	1.66	<0.0622	7.36	0.809	--	
"	5	6.5' @ T1x15'N	6.5'	<5.28	--	--	<0.0106	<0.0528	<0.0264	<0.0792	--	--	--	--	--	--	--	--	
"	6 ²	4.25' @ T1x7'S	4.25'	43.6	<25.0	<50.0	<0.0112	<0.0561	<0.0280	<0.0841	<0.112	<0.0561	<0.0280	<0.0561	<0.0561	<0.0561	<0.0561	--	
"	7	T1 N Bottom UST	11'	873	--	--	<0.0123	<0.0613	0.935	0.314	--	--	--	--	--	--	--	--	
"	8	T1 S Bottom UST	11'	116	--	--	<0.0118	<0.059	<0.0295	<0.0885	--	--	--	--	--	--	--	--	
"	9	T1 M Bottom UST	11'	1.410	--	--	<0.116	<0.578	<0.289	<0.867	--	--	--	--	--	--	--	14.0	
"	10	8.5' @ T1 S end	8.5'	<5.56	--	--	<0.0111	<0.0556	<0.0278	<0.0834	--	--	--	--	--	--	--	--	
"	11	10.5' @ T1 N end	10.5'	2,980	120	<53.5	<0.354	<1.77	<0.885	<2.65	<3.54	<0.885	<0.885	2.64	<1.77	<1.77	<1.77	--	
"	12	T2 N end Bottom	11'	12,300	760	<422	<1.17	<5.85	144	<8.78	121	<2.93	<2.93	30.8	<5.85	<5.85	<5.85	10.5	
"	13	T2 Middle Bottom	11'	5,140	589	656	<1.10	<5.50	40.8	<8.24	30.7	<2.75	<2.75	9.89	<5.50	<5.50	<5.50	--	
"	14	T2 S end Bottom	11'	10,700	1,430	<2170	<1.27	<6.36	65.2	28.2	43.8	<3.18	<3.18	16.3	<6.36	392	60	12.4	
04/12/17	15	T3 S end @5'	5'	<5.43	<25.0	<50.0	<0.0109	<0.0543	<0.0271	<0.0814	--	--	--	--	--	--	--	--	
"	16	T3 N end @4.5'	4.5'	265	28.6	52.9	<0.0107	<0.0537	0.0924	<0.0805	--	--	--	--	--	--	--	--	
"	17 ³	T3 N end@6.5'	6.5'	12.2	<27.9	<55.9	<0.0176	<0.0882	<0.0441	<0.1323	<0.176	<0.0882	<0.0441	<0.0882	<0.0882	<0.0882	<0.0882	--	
"	18	N T3 Bottom	11'	5,470	314	<222	<0.147	<0.736	34.4	8.83	--	--	--	--	--	--	--	--	
"	19	Mid T3 Bottom	11'	10,800	1,030	<209	0.807	<0.549	177	3.42	--	--	--	--	--	--	--	14.4	
"	20	S T3 Bottom	11'	2,410	298	88.4	0.144	<0.627	35.5	<0.940	--	--	--	--	--	--	--	--	
04/13/17	21	3' @ Prod Lines	3'	<5.46	<25.0	<50.0	<0.109	<0.0546	<0.0273	<0.0819	--	--	--	--	--	--	--	--	
"	22	6'x10'Nx50'W	6.0'	Discarded - Not Tested			--	--	--	--	--	--	--	--	--	--	--	--	
"	23	6' x0'Nx50'W	6'	Discarded - Not Tested			--	--	--	--	--	--	--	--	--	--	--	--	
"	24	12' Pothole 1	12'	Discarded - Not Tested			--	--	--	--	--	--	--	--	--	--	--	--	
"	25	14' Pothole 1	14'	1,620	189	<50.0	<0.125	<0.626	0.707	<9.39	--	--	--	--	--	--	--	--	
"	26	17' Pothole 1	17'	7.38	<25.0	<50.0	<0.0113	<0.0567	<0.0283	<0.085	--	--	--	--	--	--	--	--	
"	27	8' x 15'N	8'	Discarded - Not Tested			--	--	--	--	--	--	--	--	--	--	--	--	
"	28	9'x16'W	9'	<9.54	<25.5	<50.9	<0.191	<0.0954	<0.0477	<0.143	--	--	--	--	--	--	--	--	
04/19/17	29	10'x3'@ of 24	10'	<10.0	<28.8	<57.6	<0.0201	<0.100	<0.0502	<0.151	--	--	--	--	--	--	--	--	
"	30	14'8" W Toe above #31	14.7'	<6.07	<25.0	<50.0	<0.0121	<0.0607	<0.0303	<0.0910	<0.121	<0.0303	<0.0303	<0.0607	<0.0607	<0.0607	<0.0607	--	
RBDM exposure limits for Occupational Users ⁴				130	>Max	>Max	0.10	490	0.90	100	0.34	5.6x10 ⁻⁴	0.013	57,000	0.54	12	110	30	
RBDM exposure limits for Construction Workers				9,700	4,600	11,000	380	77x10 ⁴	17,000	56x10 ⁴	16,000	9.0	200	27,000	12,000	2,900	2,900	30	
RBDM exposure limits for Excavation Workers				>Max	>Max	>Max	11,000	28,000	49,000	20,000	580	250	5,600	750,000	320,000	81,000	81,000	800	

Notes:

"B" means benzene

"T" means toluene

"E" means ethylbenzene "X" means xylenes

"EDB" means Ethylene Di-Bromide

"EDC" means 1,2-Dichloroethane

"iso-PB" means iso-propylbenzene "n-PB" means n-propylbenzene

"MTBE" means methyl tert-butyl ether

"1,2,4-TMB" means 1,2,4-Trimethylbenzene

"1,3,5-TMB" means 1,3,5-Trimethylbenzene "N" means Naphthalene

Red indicates result is above regulatory cleanup limit

Blue - lab detection limit above regulatory cleanup limit

"--" means not tested

Footnote ¹ Full scan of 64 VOC compounds. No chlorinated solvents or non-petroleum chemicals detected. Refer to Apex Lab Report # A7D0344 for complete list of individual compounds.Footnote ² Full scan of 64 VOC compounds. No contaminants detected. Refer to Apex Lab Report # A7D0344 for complete list of individual compounds.Footnote ³ Full scan of 64 VOC compounds. No contaminants detected. Refer to Apex Lab Report # A7D0347 for complete list; including **Total Lead = 14.4 mg/Kg** (RBDM limit = 30 mg)Footnote ⁴ Most stringent pathway for Occupational Users is "Leaching to Groundwater".

Yellow Highlight Indicates data was revised or added by MSBA on April 8, 2025 following data review

Table 3 - Soil Cleanup Analytical Results

Astro 207 in Eugene, Oregon

Date Collected	Sample ID and Location		Depth in Feet	NWTPH	NWTPH-Dx		Volatile Organic Compounds (VOCs)											Total Lead
				-Gx	Diesel	Oil	B	T	E	X	N	EDB	EDC	iso-PB	MTBE	1,2,4-TMB	1,3,5-TMB	
				milligrams per kilogram (mg/Kg) -----														
"	31	16'2" W Toe below #30	16.1'	11.2	<25.0	<50.0	0.0543	<0.0610	<0.0305	<0.0915	<0.122	<0.0305	<0.0305	<0.0610	<0.0610	<0.0610	<0.0610	--
"	321	4' below SE dispenser	4'	<24.7	<61.8	<124	--	--	--	--	--	--	--	--	--	--	--	--
"	33	15'x42"W (Wall)	15'	<6.40	<25.0	<50.0	<0.0128	<0.0640	<0.0320	<0.0960	<0.128	<0.0320	<0.0320	<0.0640	<0.0640	<0.0640	<0.0640	--
"	34	16'x42"W (Wall)	16'	11.2	<25.0	<50.0	<0.0110	<0.0548	0.0373	<0.0822	<0.110	<0.0274	<0.0274	<0.0548	<0.0548	<0.0548	<0.0548	--
"	35	11.5'xT3 so. End	11.5'	1,530	--	--	0.301	<0.913	23.9	<1.37	--	--	--	--	--	--	--	--
"	36	14.5'xT3 so. End	14.5'	15,500	--	--	25.5	<3.07	159	180	87.5	<1.53	<1.53	17.5	<3.07	461	76	--
"	37	16'xT3 so. End	16'	258	--	--	0.2	<0.0659	1.26	1.13	1.4	<0.0329	<0.0329	0.208	<0.0659	5.32	0.823	--
"	38	16.5' (below 21)	16.5'	12.4	--	--	0.0456	<0.0530	0.0551	<0.0795	<0.106	<0.0265	<0.0265	<0.0530	<0.0530	<0.0530	<0.0530	--
"	39	T2 11.5'x26'Wx10'N	11.5'	2,330	--	--	<0.188	<0.942	16.7	<1.41	--	--	--	--	--	--	--	--
"	40	T2 11.5'x26'Wx25'N	11.5'	2,610	--	--	0.235	<0.980	40.8	<1.47	--	--	--	--	--	--	--	--
"	41	T2 12.5'x26'Wx10'N	12.5'	676	--	--	0.0913	<0.183	5.89	<0.274	--	--	--	--	--	--	--	--
"	42	T2 13.0'x26'Wx25'N	13.0'	896	--	--	0.303	<0.191	9.63	<0.287	5.09	<0.0957	<0.0957	1.11	<0.191	1.52	<0.191	--
04/20/17	43	T1 S corner @10'	10'	1,070	483	<50.0	<0.0470	<0.235	1.02	<0.353	--	--	--	--	--	--	--	--
"	44			Field Discarded - Not Tested				--	--	--	--	--	--	--	--	--	--	--
"	45	Pit Water - Refer to Table 4		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	46	12'Nx0'Wx8.5'	8.5	<8.26	<26.7	<53.4	<0.0165	<0.0826	<0.413	<0.124	<0.165	<0.0413	<0.0413	<0.0826	<0.0826	<0.0826	<0.0826	--
"	47	8'Sx0'Wx9'	9'	<8.34	<27.3	<54.5	<0.0167	<0.0834	<0.417	<0.125	<0.167	<0.0417	<0.0417	<0.0834	<0.0834	<0.0834	<0.0834	--
"	48			Field Discarded - Not Tested				--	--	--	--	--	--	--	--	--	--	--
"	49			Field Discarded - Not Tested				--	--	--	--	--	--	--	--	--	--	--
"	50	N wall @ 9' x 15'W	9'	952	576	<56.2	<0.0603	<0.301	<0.151	<0.452	<0.603	<0.151	<0.151	0.353	<0.301	<0.301	<0.301	--
04/21/17	51	15'X7'Wx0'N	15'	4,000	--	--	<0.0499	<0.249	1.32	<0.0374	1.15	<0.499	<0.125	0.84	<0.249	<0.249	2.50	--
"	52	16'x7'Wx3'N	16'	<6.12	--	--	<0.0122	<0.0612	<0.0306	<0.0918	<0.122	<0.0306	<0.0360	<0.0612	<0.0612	<0.0612	<0.0612	--
"	53	14'x23'Wx3'N	14'	1,340	--	--	<0.0470	<0.235	0.263	<0.352	<0.47	<0.117	<0.117	0.484	<0.235	<0.235	<0.235	--
"	54	15'x23'Wx3'N	15'	<6.21	--	--	<0.0124	<0.0621	<0.031	<0.0931	<0.124	<0.0310	<0.0310	<0.0621	<0.0621	<0.0621	<0.0621	--
"	55	11'x23'Nx25'W	11'	Lab Discarded - Not Tested				--	--	--	--	--	--	--	--	--	--	--
"	56	13'x23'Nx23'W	13'	98	--	--	0.0878	<0.0944	1.31	<0.142	<0.189	<0.0472	<0.0472	0.131	<0.0944	<0.0944	<0.0944	--
04/24/17	57	15'x45'Nx5'W	15'	<6.08	--	--	0.0194	<0.0608	<0.0304	<0.0911	<0.122	<0.0304	<0.0304	<0.0608	<0.0608	<0.0608	<0.0608	--
"	58	16'x45'Nx5'W	16'	<6.46	--	--	0.0291	<0.0646	<0.0323	<0.0969	<0.129	<0.0323	<0.0323	<0.0646	<0.0646	<0.0646	<0.0646	--
"	59	11'x54'Nx15'W	11'	1,650	--	--	<0.0696	<0.348	<0.174	<0.522	<0.696	<0.174	<0.174	0.936	<0.348	<0.348	<0.348	--
"	60	16.5'x54'Nx15'W	16.5'	<6.25	--	--	<0.0125	<0.0625	<0.0313	<0.0938	<0.125	<0.0313	<0.0313	<0.0625	<0.0625	<0.0625	<0.0625	--
RBDM exposure limits for Occupational Users ²				130	>Max	>Max	0.10	490	0.90	100	0.34	5.6x10 ⁻⁴	0.013	57,000	0.54	12	110	30
RBDM exposure limits for Construction Workers				9,700	4,600	11,000	380	77x10 ⁴	17,000	56x10 ⁴	16,000	9.0	200	27,000	12,000	2,900	2,900	30
RBDM exposure limits for Excavation Workers				>Max	>Max	>Max	11,000	28,000	49,000	20,000	580	250	5,600	750,000	320,000	81,000	81,000	800

Notes:

"B" means benzene
 "T" means toluene
 "E" means ethylbenzene
 "X" means xylenes

"EDB" means Ethylene Di-Bromide
 "EDC" means 1,2-Dichloroethane
 "iso-PB" means iso-propylbenzene
 "n-PB" means n-propylbenzene

"MTBE" means methyl tert-butyl ether
 "1,2,4-TMB" means 1,2,4-Trimethylbenzene
 "1,3,5-TMB" means 1,3,5-Trimethylbenzene
 "N" means Naphthalene

Red indicates result is above regulatory cleanup limit
 Blue - lab detection limit is above regulatory cleanup limit
 "-" means not tested

Yellow Highlight Indicates data was revised or added by MSBA on April 8, 2025 following data review

Table 3 - Soil Cleanup Analytical Results

Astro 207 in Eugene, Oregon

Date Collected	Sample ID and Location		Depth in Feet	NWTPH	NWTPH-Dx		Volatile Organic Compounds (VOCs)											Total
				-Gx	Diesel	Oil	B	T	E	X	N	EDB	EDC	Iso-PB	MTBE	1,2,4-TMB	1,3,5-TMB	Lead
				milligrams per kilogram (mg/Kg)														
4/24/2017	61	11'x54'Nx25'W	11.0'	15,500	--	--	<0.0969	0.989	106	308	58.9	<0.323	<0.162	13.7	<0.323	351	89.2	--
"	62	11'x30'Nx15'W	11.0'	1,960	--	--	<0.0890	<0.445	3.83	<0.668	<0.890	<0.223	<0.223	2.3	<0.445	<0.445	<0.445	--
"	63	11'x42'Nx15'W	11.0'	1,190	--	--	<0.0699	<0.350	10.1	<0.525	1.47	<0.175	<0.175	1.89	<0.350	<0.350	<0.350	--
"	64	64-11'x42'Nx25'N	11.0'	33.2	--	--	<0.0161	<0.0804	0.561	<0.121	0.192	<0.0402	<0.0402	<0.0804	<0.0804	<0.0804	<0.0804	--
"	65	15'x54'Nx15'W	15.0'	9.82	--	--	0.0185	<0.0562	0.0646	<0.0843	<0.112	<0.0281	<0.0281	<0.0562	<0.0562	0.171	<0.0562	--
4/27/2017	66	16'x30'Nx15'W	16.0'	<6.14	--	--	0.0418	<0.0614	0.112	<0.0922	<0.123	<0.0307	<0.0307	<0.0614	<0.0614	<0.0614	<0.0614	--
"	67	12'x45'Nx35'W	12.0'	<8.53	--	--	<0.0171	<0.0853	<0.0427	<0.128	<0.171	<0.0427	<0.0427	<0.0853	<0.0853	<0.0853	<0.0853	--
"	68	15'x52'Nx35'W	15.0'	181	--	--	0.102	<0.0899	0.828	0.748	0.591	<0.0450	<0.0450	0.139	<0.0899	3.31	0.495	--
"	69	16'x52'Nx35'W	16.0'	<9.00	--	--	<0.0180	<0.0900	<0.0450	<0.135	<0.180	<0.0450	<0.0450	<0.0900	<0.0900	<0.0900	<0.0900	--
"	70	16'x45'Nx35'W	16.0'	<7.37	--	--	<0.0147	<0.0737	<0.0368	<0.110	<0.147	<0.0368	<0.0368	<0.0737	<0.0737	0.0899	<0.0737	--
"	71	15'x40'Nx45'W	15.0'	7,090	--	--	1.25	<1.49	31.4	47.5	24.4	<0.746	<0.746	4.95	<1.49	142	7.68	--
"	72	16'x40'Nx45'W	16.0'	<7.96	--	--	0.0605	<0.0796	0.0974	<0.119	<0.159	<0.0398	<0.0398	<0.0796	<0.0796	<0.0796	<0.0796	--
4/27/2017	73	16'x45'Nx15'W	16.0'	<7.32	--	--	<0.0146	<0.0732	0.0417	<0.110	<0.146	<0.0366	<0.0366	<0.0732	<0.0732	<0.0732	<0.0732	--
"	74	15'x15'Nx5'W	15.0'	14.6	--	--	0.0269	<0.0927	0.089	<0.139	<0.185	<0.0464	<0.0464	<0.0927	<0.0927	0.147	<0.0927	--
"	75	16'x15'Nx5'W	16.0'	16.9	--	--	0.0258	<0.0646	0.0749	<0.0969	<0.129	<0.0323	<0.0323	<0.0646	<0.0646	0.119	<0.0646	--
5/03/2017	76	16'x50'Nx50'W	16.0'	<20	--	--	<0.02	<0.30	<0.30	<0.60	--	--	--	--	--	--	--	--
"	77	14.5'x50'Nx50'W	14.5'	<20	--	--	<0.02	<0.30	<0.30	<0.60	--	--	--	--	--	--	--	--
"	78	12'x50'Nx53'W	12.0'	15,700	--	--	6.39	<0.30	30.16	46.22	--	--	--	--	--	--	--	--
"	79	13'x29'Nx54'W	13.0'	Discarded - Not Tested			--	--	--	--	--	--	--	--	--	--	--	--
"	80	14'x32'Nx56'W	14.0'	992	--	--	1.52	<0.30	7.31	1.58	--	--	--	--	--	--	--	--
"	81	16'x32'Nx56'W	16.0'	13,300	--	--	19.79	0.36	47.99	59.89	--	--	--	--	--	--	--	--
"	82	17'x32'Nx56'W	17.0'	Discarded - Not Tested			--	--	--	--	--	--	--	--	--	--	--	--
"	83	18'x32'Nx56'W	18.0'	<20	--	--	0.08	<0.30	<0.30	<0.60	--	--	--	--	--	--	--	--
"	84	13'x50'Nx55'W	13.0'	385	--	--	0.22	<0.30	0.65	1.05	--	--	--	--	--	--	--	--
"	85	16'x50'Nx55'W	16.0'	<20	--	--	0.03	<0.30	<0.30	<0.60	--	--	--	--	--	--	--	--
"	86	16.5'x30'Nx25'W	16.5'	<20	--	--	0.33	<0.30	<0.30	<0.60	--	--	--	--	--	--	--	--
"	87	15'x45'Nx5'W	Pit Water - Refer to Table 4			--	--	--	--	--	--	--	--	--	--	--	--	--
6/26/2017	87	Intended to be 88	Pit Water - Refer to Table 4			--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/2017	88	3' @ Office Door	3'	<7.73	<25.0	<50.1	--	--	--	--	--	--	--	--	--	--	--	--
"	89	2.5' @ Restroom Dr.	2.5'	<6.47	<25.3	56.4	--	--	--	--	--	--	--	--	--	--	--	--
"	90	9.0' @ Restroom Dr.	9.0'	<7.36	<26.7	<53.4	--	--	--	--	--	--	--	--	--	--	--	--
RBDM exposure limits for Occupational Users ¹				130	>Max	>Max	0.10	490	0.90	100	0.34	5.6x10 ⁻⁴	0.013	57,000	0.54	12	110	30
RBDM exposure limits for Construction Workers				9,700	4,600	11,000	380	77x10 ⁴	17,000	56x10 ⁴	16,000	9.0	200	27,000	12,000	2,900	2,900	30
RBDM exposure limits for Excavation Workers				>Max	>Max	>Max	11,000	28,000	49,000	20,000	580	250	5,600	750,000	320,000	81,000	81,000	800

Notes:

"B" means benzene

"EDB" means Ethylene Di-Bromide

"MTBE" means methyl tert-butyl ether

Red indicates result is above regulatory cleanup limit

"T" means toluene

"EDC" means 1,2-Dichloroethane

"1,2,4-TMB" means 1,2,4-Trimethylbenzene

Blue - lab detection limit is above regulatory cleanup limit

"E" means ethylbenzene

"iso-PB" means iso-propylbenzene

"1,3,5-TMB" means 1,3,5-Trimethylbenzene

"--" means not tested

"X" means xylenes

"n-PB" means n-propylbenzene

"N" means Naphthalene

Yellow Highlight Indicates data was revised or added by MSBA on April 8, 2025 following data review

Table 3 - Soil Cleanup Analytical Results

Astro 207 in Eugene, Oregon

Date Collected	Sample ID and Location		Depth in Feet	TPH-HCID	TPH-Gx	NWTPH-Dx		Volatile Organic Compounds (VOCs)											Total Lead	
						Diesel	Oil	B	T	E	X	N	EDB	EDC	iso-PB	MTBE	1,2,4-TMB	1,3,5-TMB		
						milligrams per kilogram (mg/Kg)														
6/27/2017	91	4'@NE Fuel Dispenser	4'	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	92	4'@NW Fuel Dispenser	4'	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	93	4'@SW Fuel Dispenser	4'	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	94	4'@Diesel Dispenser	4'	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	951	7'@Rectangular Fill	7'	--	40.6	<25	<50	0.0125	<0.519	<0.0259	<0.0778	<0.104	<0.0519	<0.0259	0.0545	<0.0519	<0.0519	<0.0519	<0.0519	--
6/27/2017	96	Pit by Office	8'	--	<20	<25	<100	<0.20	<0.30	<0.30	<0.60	--	--	--	--	--	--	--	--	--
"	97	60'Wx7'Nx13'D	13'	--	3.020	<25	<100	0.11	<0.30	5.6	0.65	--	--	--	--	--	--	--	--	--
6/30/2017	98	101'Wx1'Nx2.5'D	2.5'	--	<7.25	--	--	<0.0145	<0.725	<0.0362	<0.109	--	--	--	--	--	--	--	--	--
"	99	77'Wx10'Nx16'D	16'	--	<6.00	--	--	<0.0120	<0.600	<0.0300	<0.0900	<0.120	<0.0300	<0.0300	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	--
"	100	Oil Water Separator	Internal Tank Liquids - Refer to Table 4				--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/5/2017	101	Floor @ 16.5'	16.5'	--	<5.49	--	--	<0.0110	<0.0549	<0.0274	<0.0823	<0.110	<0.0274	<0.0274	<0.0549	<0.0549	<0.0549	<0.0549	<0.0549	--
"	102	S Wall @ 14'	14'	--	367	--	--	<0.0164	<0.0821	<0.0411	<0.123	<0.164	<0.0411	<0.0411	0.117	<0.0821	<0.0821	<0.0821	<0.0821	--
"	103	25'N x P19 @ 10'	10'	--	12,300	--	--	<0.222	<1.110	18.3	46.5	25.7	<0.555	<0.555	11.4	<1.110	136	46.6	46.6	--
"	104	16' x 10'N x 108'W	16'	--	<7.06	--	--	<0.0141	<0.0706	<0.0353	<0.106	<0.141	<0.0353	<0.0353	<0.0706	<0.0706	<0.0706	<0.0706	<0.0706	--
"	105	15' bgs (above 104)	15'	--	14,800	--	--	<0.304	<1.52	14.3	<2.280	25.2	<0.760	<0.760	15.4	<1.520	4.81	4.81	<1.520	--
7/6/2017	106	10'Nx3'Wx11' Pit	11'	--	614	--	--	<0.0112	<0.056	<0.028	<0.084	<0.112	<0.028	<0.028	0.523	<0.056	<0.056	<0.056	<0.056	5.99
"	107	25'Nx84'Wx16'	16'	--	10.9	--	--	0.0549	<0.0624	<0.0643	<0.0936	<0.125	<0.0312	<0.0312	<0.0624	<0.0624	<0.0624	<0.0624	<0.0624	--
"	108	25'Nx95'Wx16'	16'	--	7.66	--	--	0.0382	<0.0669	0.0402	<0.100	<0.134	<0.0335	<0.0335	<0.0669	<0.0669	<0.0669	<0.0669	<0.0669	--
"	109	45'Nx83'Wx16'	16'	--	<7.17	--	--	<0.0143	<0.0717	<0.0358	<0.107	<0.143	<0.0358	<0.0358	<0.0717	<0.0717	0.0739	0.0739	<0.0717	--
"	110	67'Nx50'Wx16'	16'	--	150	--	--	0.0277	<0.0739	0.0959	<0.119	<0.159	<0.0396	<0.0396	0.131	<0.0793	0.146	0.146	<0.0793	--
7/7/2017 ²	111a	50'Nx110'Wx15.5'	15.5'	--	<8.12	--	--	<0.0162	<0.0812	<0.0406	<0.122	<0.162	<0.0406	<0.0406	<0.0812	<0.0812	<0.0812	<0.0812	<0.0812	--
"	112a	50'Nx115'Wx13'	13'	--	<6.63	--	--	<0.0133	<0.0663	<0.0332	<0.0995	<0.133	<0.0332	<0.0332	<0.0663	<0.0663	<0.0663	<0.0663	<0.0663	1.77
"	113a	N Side Toe @ 15'	15'	--	<6.82	--	--	<0.0136	<0.0682	<0.0341	<0.102	<0.136	<0.0341	<0.0341	<0.0682	<0.0682	<0.0682	<0.0682	<0.0682	--
7/24/2017	111	10'E @ 2'bgs (office)	2'	--	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	112	15'E @ 14.5'bgs (office)	14.5'	--	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	113	30'E @ 15'bgs (office)	15'	--	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	114	N of T1 Fill @ P.L. @ 14'	14'	--	9,390	<25	<100	<0.200	<0.200	28.5	27.2	47.6	<0.200	<0.200	5.62	<0.200	62.7	1.81	1.81	<9
"	115	15'N x 12'E x 13'	13'	--	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
RBDM exposure limits for Occupational Users ³					130	>Max	>Max	0.10	490	0.90	100	0.34	5.6x10 ⁻⁴	0.013	57,000	0.54	12	110	110	30
RBDM exposure limits for Construction Workers					9,700	4,600	11,000	380	77x10 ⁴	17,000	56x10 ⁴	16,000	9.0	200	27,000	12,000	2,900	2,900	2,900	30
RBDM exposure limits for Excavation Workers					>Max	>Max	>Max	11,000	28,000	49,000	20,000	580	250	5,600	750,000	320,000	81,000	81,000	81,000	800

Notes:

"B" means benzene

"EDB" means Ethylene Di-Bromide

"MTBE" means methyl tert-butyl ether

Red indicates result is above regulatory cleanup limit

"T" means toluene

"EDC" means 1,2-Dichloroethane

"1,2,4-TMB" means 1,2,4-Trimethylbenzene

Blue - lab detection limit is above regulatory cleanup limit

"E" means ethylbenzene "X" means xylenes

"iso-PB" means iso-propylbenzene "n-PB" means n-propylbenzene

"1,3,5-TMB" means 1,3,5-Trimethylbenzene "N" means Naphthalene

"--" means not tested

Footnote ¹ Full scan of VOC reports 64 compounds. No chlorinated solvents or non-petroleum chemicals detected. Refer to Apex Lab Report # A7F0761 for complete list of individual compounds.

Footnote ² Samples numbers 111, 112 and 113 were accidentally used twice. To maintain unique sample IDs, those collected on 7/7/2017 have been designated by addition of "a".

Footnote ³ Most stringent pathway for Occupational Users is "Leaching to Groundwater".

Yellow Highlight Indicates data was revised or added by MSBA on April 8, 2025 following data review

Table 3 - Soil Cleanup Analytical Results

Astro 207 in Eugene, Oregon

Page 5 of 5

Date Collected	Sample ID and Location		Depth in Feet	NWTPH	NWTPH-Dx		Volatile Organic Compounds (VOCs)											Total Lead
				-Gx	Diesel	Oil	B	T	E	X	N	EDB	EDC	iso-PB	MTBE	1,2,4-TMB	1,3,5-TMB	
				----- milligrams per kilogram (mg/Kg) -----														
7/26/2017	116	3'N x 1'W x 13'	13'	174	<25	<100	<0.200	<0.200	<0.200	<0.400	1.28	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	117	Floor @ 16'	16'	<20	185	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	118	Wall @ 10'	10'	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	119	30'E @ 8'	8'	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
"	120	15' E @ 8'	8'	<20	<25	<100	<0.200	<0.200	<0.200	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	--
9/19/2017	121	Pit Water	Refer to Table 4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	122	2' Adams St N	2'	<6.00	--	--	<0.012	<0.030	<0.060	<0.0901	--	--	--	--	--	--	--	--
"	123	3' Adams St M	3'	<4.92	--	--	<0.00985	<0.0246	<0.0492	<0.0739	--	--	--	--	--	--	--	--
"	124	3' Adams St S	3'	<5.55	--	--	<0.0111	<0.0272	<0.0555	<0.0832	--	--	--	--	--	--	--	--
"	125	2' W 6th Ave E	2'	<5.03	--	--	<0.0101	<0.0252	<0.0503	<0.0755	--	--	--	--	--	--	--	--
"	126	2.5' W 6th Ave E	2.5'	<4.97	--	--	<0.00995	<0.0249	<0.0497	<0.0746	--	--	--	--	--	--	--	--
"	127	1.5' W 6th Ave M	1.5'	<6.62	--	--	<0.0132	<0.0331	<0.0662	<0.0994	--	--	--	--	--	--	--	--
"	128	1.5' W 6th Ave W	1.5'	<6.32	--	--	<0.0126	<0.0316	<0.0632	<0.0947	--	--	--	--	--	--	--	--
"	129	2.5' Blair S	2.5'	5.78	--	--	<0.0116	<0.0289	<0.0578	<0.0867	--	--	--	--	--	--	--	--
"	130	1.25' Blair M	1.25'	<4.45	--	--	<0.0089	<0.0223	<0.0445	<0.0668	--	--	--	--	--	--	--	--
"	131	2' Blair N	2'	<5.49	--	--	<0.0110	<0.0274	<0.0549	<0.0823	--	--	--	--	--	--	--	--
"	132	1.5' V. Lot W	1.5'	<5.78	--	--	<0.0116	<0.0289	<0.0578	<0.0868	--	--	--	--	--	--	--	--
"	133	1.25' Restroom	1.25'	<5.37	--	--	<0.0107	<0.0268	<0.0537	<0.0805	--	--	--	--	--	--	--	--
"	134	1.5' Office	1.5'	<5.81	--	--	<0.0116	<0.0291	<0.0581	<0.0872	--	--	--	--	--	--	--	--
RBDM exposure limits for Occupational Users ¹				130	>Max	>Max	0.10	490	0.90	100	0.34	5.6x10 ⁻⁴	0.013	57,000	0.54	12	110	30
RBDM exposure limits for Construction Workers				9,700	4,600	11,000	380	77x10 ⁴	17,000	56x10 ⁴	16,000	9.0	200	27,000	12,000	2,900	2,900	30
RBDM exposure limits for Excavation Workers				>Max	>Max	>Max	11,000	28,000	49,000	20,000	580	250	5,600	750,000	320,000	81,000	81,000	800

Notes:

"B" means benzene

"EDB" means Ethylene Di-Bromide

"MTBE" means methyl tert-butyl ether

Red - test result is above regulatory cleanup limit

"T" means toluene

"EDC" means 1,2-Dichloroethane

"1,2,4-TMB" means 1,2,4-Trimethylbenzene

Blue - lab detection limit is above regulatory cleanup limit

"E" means ethylbenzene

"iso-PB" means iso-propylbenzene

"1,3,5-TMB" means 1,3,5-Trimethylbenzene

"--" means not tested

"X" means xylenes

"n-PB" means n-propylbenzene

"N" means Naphthalene

Yellow Highlight Indicates data was revised or added by MSBA on April 8, 2025 following data review

Table 4 - Pit Water & O/W Separator Liquids Analytical Results

Astro 207 in Eugene, OR

Date Collected	Sample ID and Location		NWTPH -Gx	NWTPH-Dx		Volatile Organic Compounds (VOCs)											Total Lead
				Diesel	Oil	B	T	E	X	N	EDB	EDC	MTBE	1,2,4-TMB	1,3,5-TMB	iso-PB	
				micrograms per liter (ug/L)													
04/20/17	45	Pit Water	10,800	812	<151	181	11.8	311	200	143	<5.00	<5.00	<10.0	220	41.1	24.1	--
05/04/17	87	Sheen only on Pit Water ⁵	696x10 ⁸	--	--	--	--	--	--	--	--	--	--	--	--	--	--
"	87	Pit Water Only	10,700	--	--	<1.0	<1.0	4	33	432	<1.0	<1.0	<1.0	394	78	13	--
06/26/17	87a ⁶	Pit Water Only	<100	406	<381	<0.200	<1.00	<0.500	<1.50	<2.00	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	2.98
06/30/17	100	Oil Water Separator ¹	1,380	73,800	584,000	--	--	--	--	--	--	--	--	--	--	--	--
09/19/17	121	Pit Water	2,000	--	--	1.3	1.39	17.7	1.88	24.3	<0.500	<0.500	<1.0	1.71	8.59	5.37	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RBDM limits for Occupational Users ²			450	430	430	2,800	s ³	8,200	23,000	11,000	590	3,900	870k	>S	>S	>S	NV ⁴
RBDM limits of Excavation Workers ²			14,000	s ³	s ³	1,800	220,000	4,500	>S	500	27	630	160k	50,000	36,000	51,000	>S
RBDM limits for Urban Residential Users ²			110	100	100	510	s ³	1,500	86,000	2,000	110	700	63,000	500	0.066	<S	NV ⁴

Notes:

"B" means benzene
"T" means toluene
"E" means ethylbenzene
"X" means xylenes
"N" means Naphthalene

"EDB" means Ethylene Di-Bromide
"EDC" means 1,2-dichloroethane
"MTBE" means methyl tert-butyl ether
"1,2,4-TMB" means 1,2,4-Trimethylbenzene
"1,3,5-TMB" means 1,3,5-Trimethylbenzene

"iso-PB" means iso-propylbenzene
Red indicates result is above regulatory cleanup limit
Blue - lab detection limit is above regulatory cleanup limit
"--" means not tested
>S means groundwater RBC exceeds the Solubility limit

Footnote ¹

Sample is internal tank liquids (not groundwater) - Test results in micrograms per liter (ug/L)

RCRA 8 Metals	Ag	As	Ba	Cd	Cr	Hg	Se	Pb
Oil Water Separator	<0.200	14.1	122	0.933	12.3	0.122	1.32	44.2

Footnote ²

RBDM pathways exclude Ingestion & Inhalation from Tap Water

Notes:

Footnote ³

Limit exceeds solubility meaning RBDM limit applies to free product only

Footnote ⁴

Chemical is considered Non-Volatile for purpose of these calculations

Footnote ⁵

Sample 87 - foamy floating sheen was seperated from water portion at Apex lab

Yellow Highlight

Indicates data was revised or added by MSBA on April 8, 2025 folowing data review